Software Requirements Specification

FPT Training System

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ASSIGNMENT 1 FRONT SHEET

Qualification	BTEC Level 5 HND Diploma in Computing		
Unit number and title	Unit 30: Application Development		
Submission date		Date Received 1st submission	
Re-submission Date		Date Received 2nd submission	
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Student declaration I certify that the assignment submission is entirely my own work and I fully understand the consequences of plagiarism. I understand that making a false declaration is a form of malpractice.			
		Student's signature	

Grading grid

P1	P2	P3	M1	M2	D1

☐ **Summative Feedback:**   ☐ **Resubmission Feedback:**

Grade:	Assessor Signature:	Date:

Internal Verifier's Comments:

Signature & Date:

Contents

1. Introduction

- After a period of research, research and learning from related projects, we have created a software with all the functions and projects required by FPT, which is building an online training management system for employees in the company. The system will include academic programs to help employees develop their expertise quickly with the help of experienced members of the company. We hope that this system will work well and help develop all trained staff as well as explain how the software works, structure and features, the software development process.

1.1. Purpose

- Currently, 4.0 technology is developing rapidly, all companies and large corporations want to develop more and receive knowledge, FPT Company is no exception. With the desire to build a continuous learning environment within the corporation. Need to develop a web-based system, which manages the activity of "Training" for internal training program of the company. This system can be used to manage student accounts, manage lecturers, manage course categories, manage courses, manage topics, assign topics for courses, assign teachers for topics, assign students to the course

1.2. Product Scope

- Our products will help employees in the company, just log in a few websites, employees can learn anytime, anywhere. It can also be used for student account management, lecturer management, course list management, course assignment and lecture assignment for topics, student assignment. This will help employees have more expertise as well as knowledge to develop themselves, thereby helping the company to improve the quality of its personnel. We have three roles in this system, an administrator, training staff and coaches

1.3. Intended Audience and Document Overview

- The intended audience of this document is all employees of FPT Corporation. Readers should have some basic knowledge to make it easier to read this document
- This document only includes a description of the product, the function of the product and how we do it, readers can read in section 2- Over Description.
- Part 3 and Part 4 are about specific requirements and other non-functional requirements. Finally there will be other requirements.

1.4. Definitions, Acronyms and Abbreviations

Table of Acronyms and Abbreviations	
Explanation	**Terms**
Software Requirements Specification	SRS
Use Case	UC
Administrator	AD

1.5. Document Conventions

- This document follows the IEEE formatting requirements. Use Time New Roman font size 11, or 12 throughout the document for text. Use italics for comments. Document text should be single spaced and maintain the 1" margins found in this template. For Section and Subsection titles please follow the template.

1.6. References and Acknowledgments

2. Overall Descriptions

2.1. Product Review

-
- This is a website that can help administrators, training staff, and training coaches. The system uses roles such as Administrators, Training Staff, Trainee and Trainer

An administrator's role

- Can log into the system via the web and can manage the entire system. Permission to create / edit / delete new user accounts, assign / change usernames (if the user is already registered) and password

A staff's role

- A registered trainer account provided by the administrator with a username and password, can create a trainee account by entering the details of the trainee including: Name, age, Date of birth, main programming language, TOEIC score, experience, department, ... After entering all the necessary information, the employee details will be stored in the database. The training staff is provided with a list of students to view and search. From the trainee list, training staff can also search by trainee account, programming language, TOEIC score. Can update, delete trainee accounts and can manage course categories such as search, add, update and delete course categories. The course includes the course name and description and can add topics such as topic name and topic description to a course, adding courses to the list. Instructor profiles can be managed such as adding, updating and deleting information: Instructor name, External or Internal type, workplace, phone and email addresses and can assign a trainer for a subject and may assign students to a course.

A trainer's role

A trainer's role

- Coaches who have been registered by the administrator can log in and can update their records such as name, age, date of birth, phone number, address, email, etc. View courses and the subject the coach is assigned

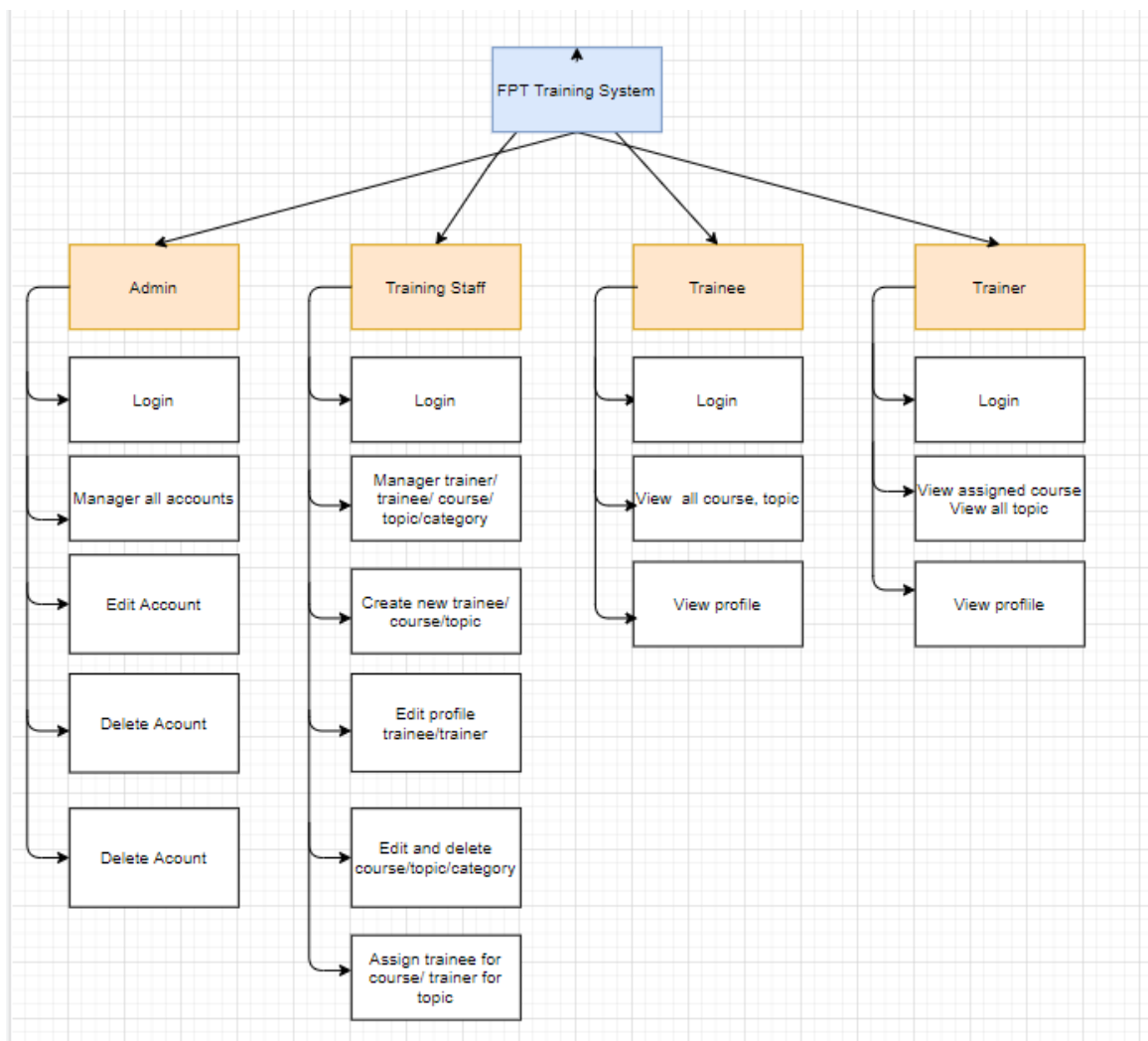# 3. Specific Requirements

- **Site-map**

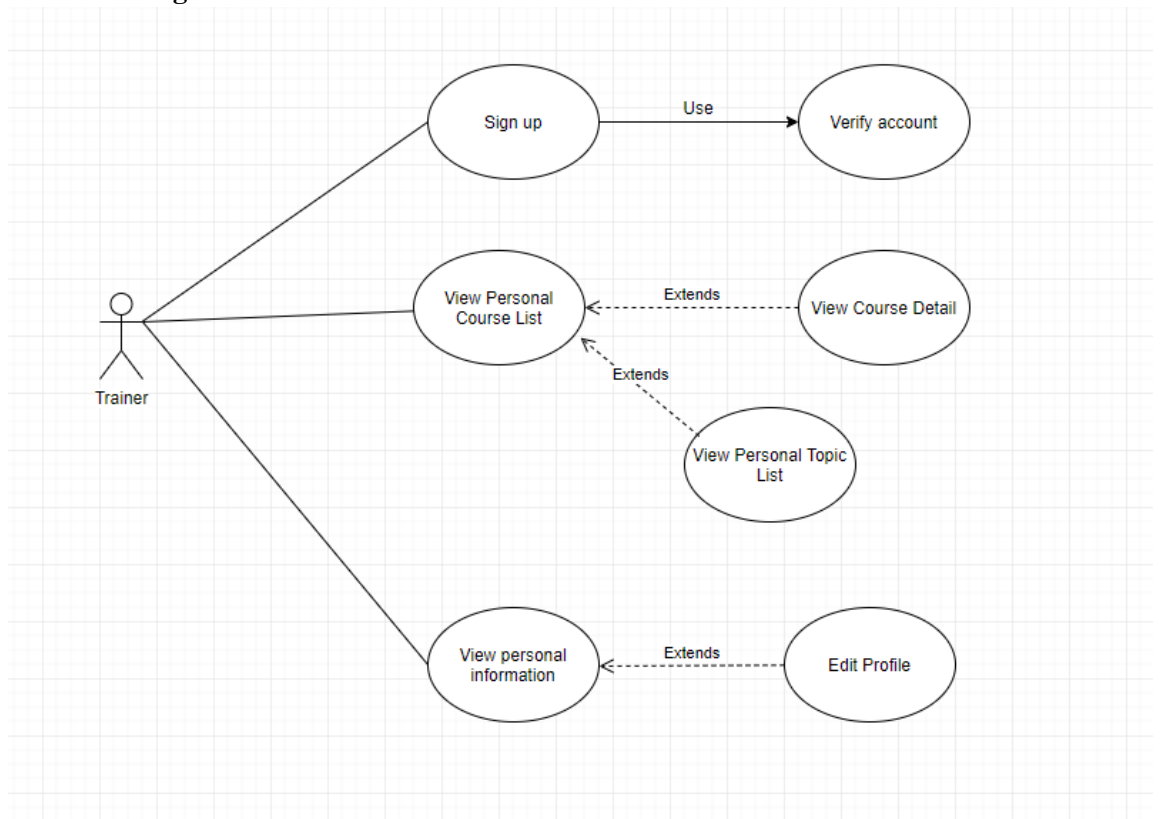*Figure 1: Site-map of System*

- **Use Case Diagram**
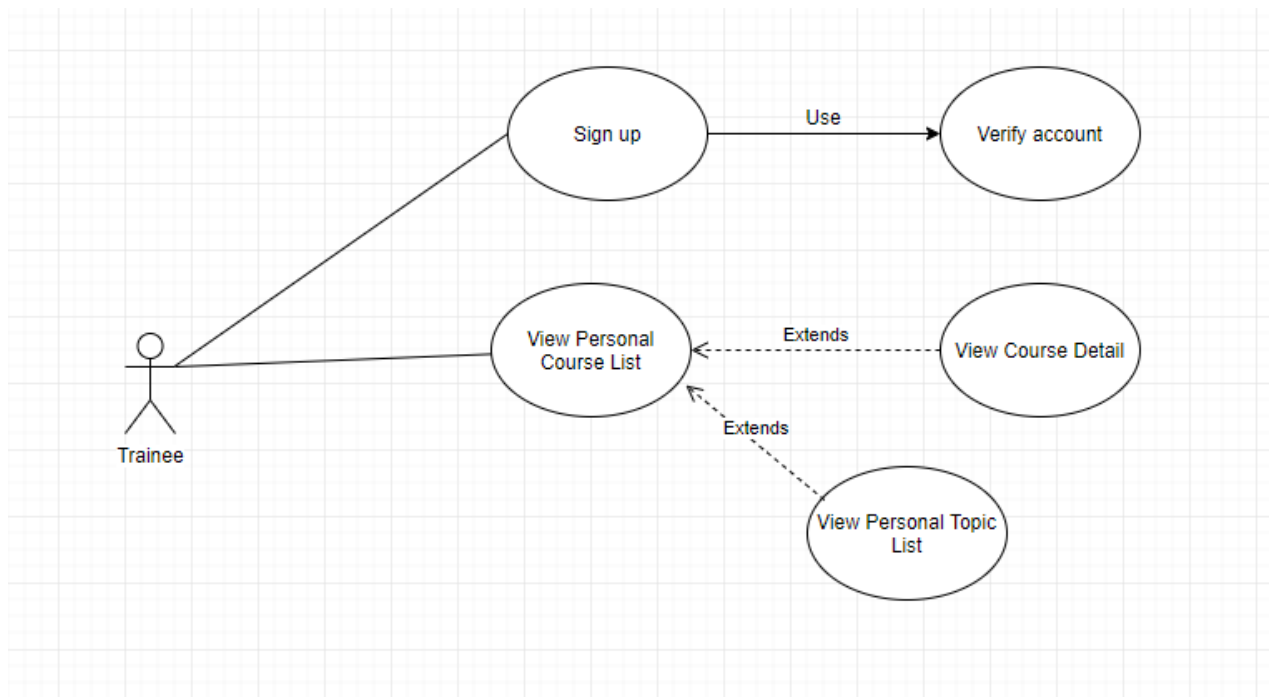

Figure 2: Trainer's role

Figure 3: Trainee's role

- **Use Case Specifications**

Trainer

Use Case 01	Code: UC01	Trainer Login to the system
Goal		Trainer Login to the system
Actor(s)		Trainer System
Pre-Conditions		The Trainer account is registered
Main flow of event		The system allows to log in to the main lobby after confirming the password

		The system displays the main lobby and and the use case end
Alternative		There is no Alternative in UC01
Post-conditions		There are no post-conditions associated with this UC

Table Use Case 1: Trainer login to the system

Use Case 02	Code: UC02	Trainer to Edit some personal information allowed
Goal		Trainer can Edit some personal information allowed
Actor(s)		Trainer
Pre-Conditions		The Trainer account is registered
Main flow of event		The system allows Trainner to log in to the system after confirming the password. Main lobby display system. Click the Detail button, then click the Edit button to edit personal information. Click the Save button to save the changed information. The system returns to the main lobby and ends the case end.

Table Use Case 2: Trainer to Edit some personal information allowed

Use Case 03	Code: UC03	Trainer view Course
Goal		Trainer, Course
Actor(s)		Trainer
Pre- Conditions		The Trainer account is registered
Main flow of event		The system allows logging in after confirming the password. Save log log into the system Main lobby display system Click Course list and use case end
Alternative		There are no Alternative with this use case
Post-conditions		There are no post-conditions associated with this use case

Table Use Case 3: Trainer view Course

Use Case 04	Code: UC04	Trainer View Topic
Goal		Trainer, Topic
Actor(s)		Trainer
Pre-Conditions		The Trainer account is registered
Main flow of event		The system validates the training password and logs into the system. Main lobby display system. We need choose Topic. The system show View Topic The system back to list and the use case end
Alternative		There are no Alternative with this use case
Post-conditions		The system save the change

Table Use Case 4: Trainer View Topic

Trainee

Use Case 05	Code: UC05	Trainee Login to the system
Goal		Trainee can login to the system
Actor(s)		Trainee, System
Pre-Conditions		The trainee account is registered
Main flow of event		The system allows logging in after confirming the trainee's password

	Main lobby display system and the use case end
Alternative	There are no Alternative with this use case
Post-Conditions	There are no post-conditions associated with this use case.

Table Use Case 5: Trainee Login to the system

Use Case 06	Code: UC06	Trainee View Course
Goal		Trainee can view Course
Actor(s)		Trainee
Pre-Conditions		The trainee account is registered
Main flow of event		The system allows logging in after confirming the trainee's password Main lobby display system Click on the list of courses The system displays the Course list and the end use case
Alternative flow of events		There are no Alternative with this use case
Post-Conditions		There are no post-conditions associated with this use case.

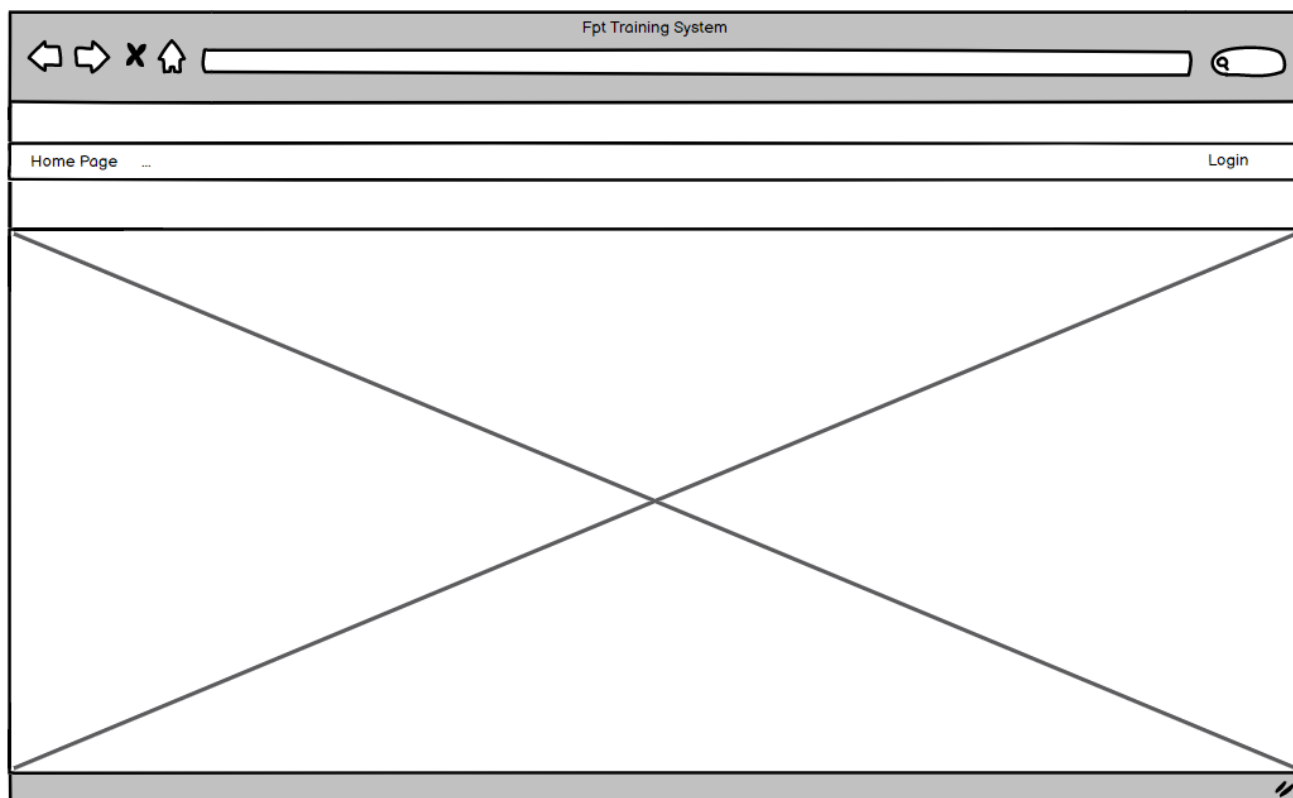*Table Use Case 6: Trainee View Course*

- **Mockup Screen**
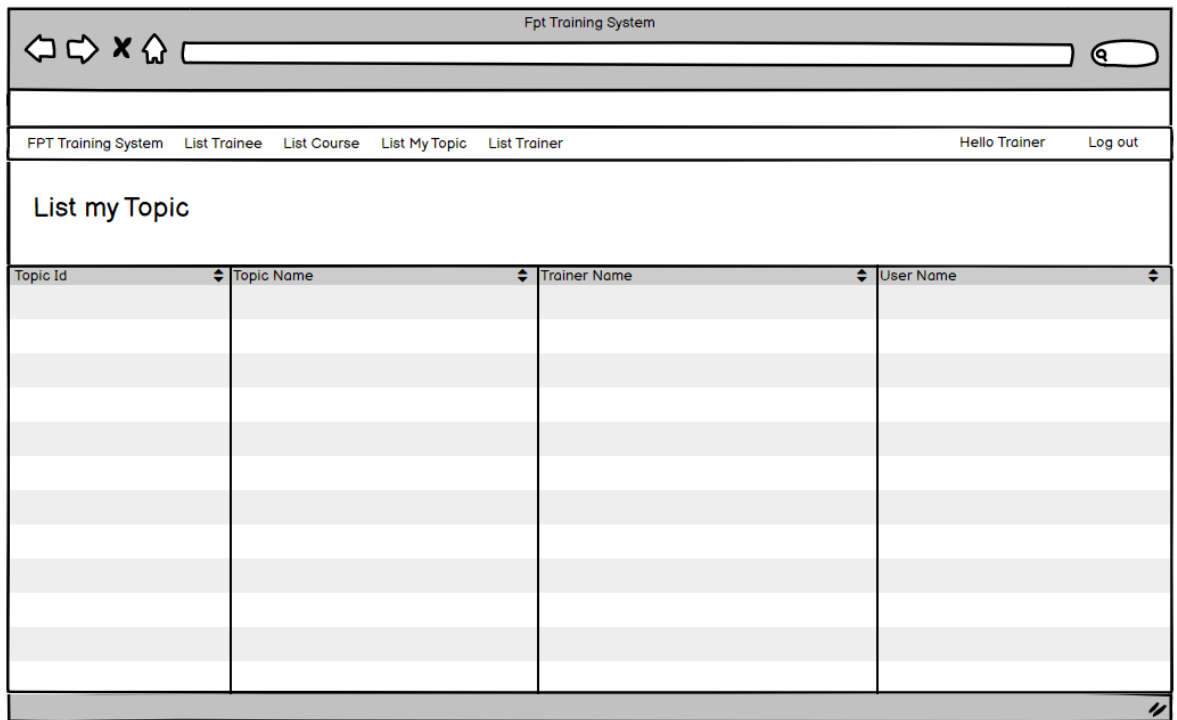- Screen default

Figure 4: Screen Default

- After Trainer Login

Figure 5: After Login Screen

- Trainer View Course

Figure 6: Trainer View Course

- Trainer View Topic

FPT Training System   List Trainee   List Course   List My Topic   List Trainer   Hello Trainer   Log out

List my Topic

Topic Id	Topic Name	Trainer Name	User Name

Figure 7: Trainer View Topic

- Trainer view Trainer Detail

FPT Training System   List Trainee   List Course   List My Topic   List Trainer   Hello Trainer   Log out

Details

Trainer Name

Trainer Type

Trainer Phone

Trainer Mail

Save

Figure 8: Trainer View Trainer Detail

- View Trainee after Login
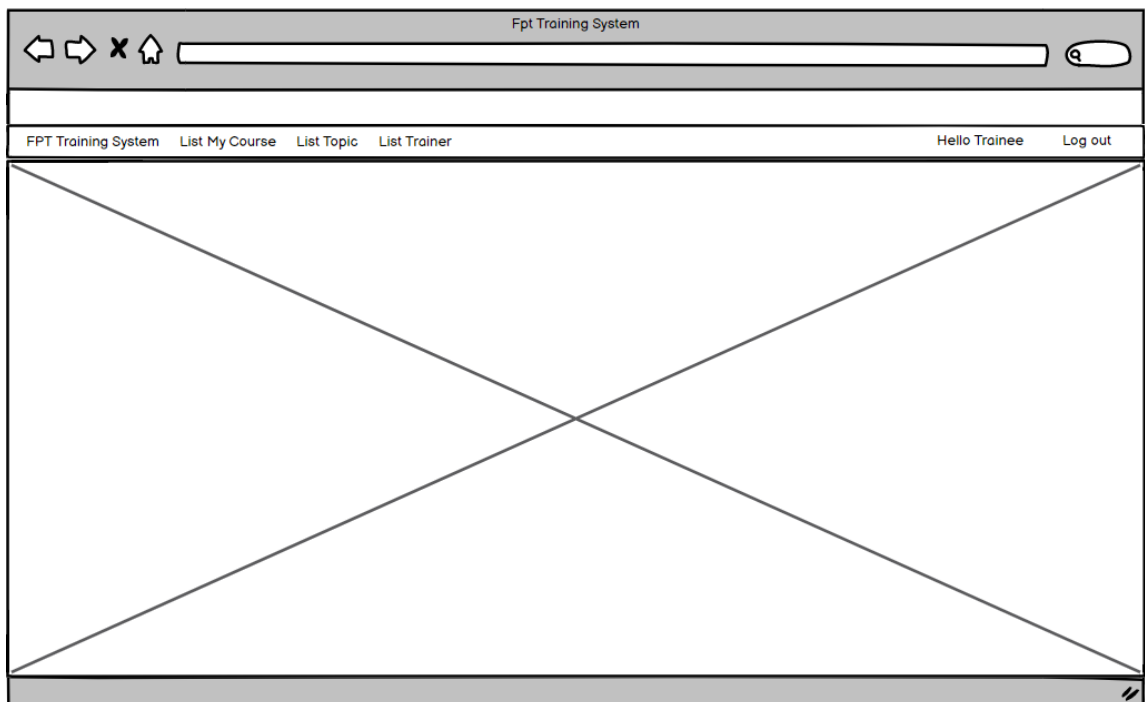
- Trainee View Course

List My Course

Course Id	Topic Name	Trainer Name

- Trainee View Trainee Topic
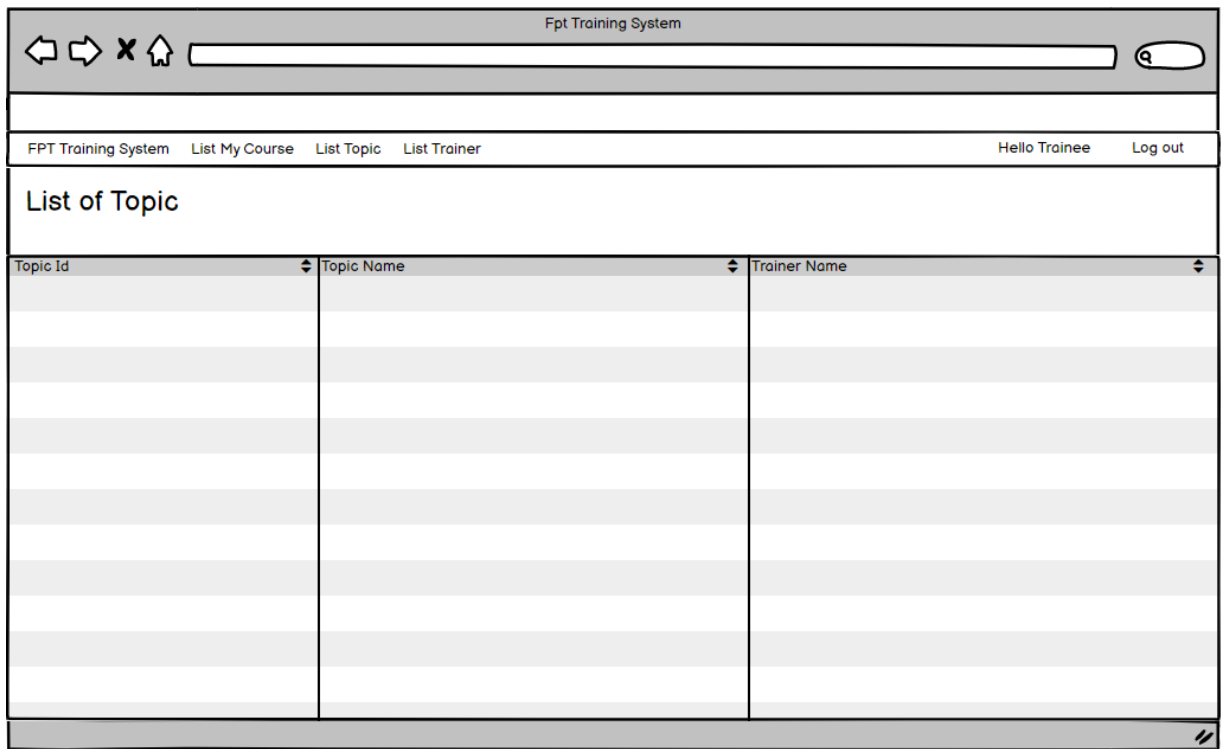
Figure 9: Trainee View Trainee Topic

- Trainee View Trainee Details

Figure 10: Trainee view Trainee Details
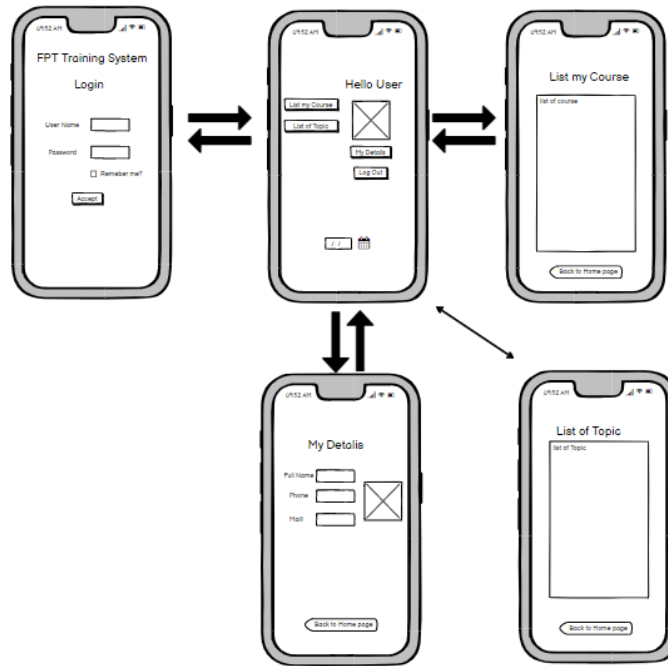
- **Screen Flow**

Figure 11: Screen Flow

4. Other Non-functional Requirements

4.1. Performance Requirements

- The system should be interactive and the associated latency should be low. Therefore, every system action response must be without delay. In case the user login fails, the error message pops up or the login is successful and the system allows the user to enter the main lobby, there must be a delay of less than 2 seconds. In case of opening the list or interacting with database such as editing information, it must be working in less than 2 seconds and must load up to> 95% of the files.

4.2. Safety and Security Requirements

- As an education related system, the transmission of information must be safe and accurate, without any change of information. Allow AD only to control and change the information of all remaining users
- Since the system provides management tools, problem solving must ensure that the system is reliable in its operations to secure sensitive details.

4.3. Software Quality Attributes

4.3.1 Availability

- If internet service is interrupted while sending information to the server, the information can be resent for verification

4.3.2 Usability

- As the system is easy to handle and navigates in the most expected way with no delays. In that case the system program reacts accordingly and transverses quickly between its states.

4.3.3 Modifiability

- Also very important. Especially in the long run when it determines the cost of developing and maintaining the product. The relevant non-functional requirements may look like the following:
  - Upgrade to the best version right after there are curriculum updates as well as major changes made by customers
  - Has all the infrastructure in code to simplify delivery and deployment process changes.

4.3.4 Testability

- There are acceptance tests for situations associated with the conversion channel
- has security checks and vulnerability scans to prevent code with security flaws

- Have 98% unit test coverage for backend and frontend code

5. Other Requirements